

## **Arizona Department of Transportation**

## **Intermodal Transportation Division**

206 South Seventeenth Avenue Phoenix, Arizona 85007-3213

Sam Elters State Engineer

May 04, 2007

PORA ADMINSTRATION 13815 W. Camino Del Sol, Sun City West, Ariz. 85375

RE: Noise Concerns - Loop 303

## Dear Sun City West Residents:

Thank you for contacting the Arizona Department of Transportation (ADOT) regarding noise concerns in your neighborhood, Sun City West, which is located adjacent to State Route Loop 303, also called The Bob Stump Memorial Parkway, between Grand Avenue and El Mirage Road.

On April 18, 2007, ADOT's noise specialist staff conducted noise level measurements in your neighborhood in response to concerns regarding existing traffic noise levels on Loop 303. ADOT followed Federal Highway Administration (FHWA) procedures to collect measurements using Larson-Davis Models 812 and 824. Noise level measurements were taken at six locations, including West Vista North Drive, West Robertson Drive, West Las Brizas, West Carbine Way, West Tomahawk Way, and North Via De La Caballa Lane. The microphones were placed five feet above ground level in accordance with FHWA noise measuring procedures. Figure 1 lists the noise level measurement locations. The measured noise levels ranged from approximately 50 decibels (hourly average) to 56 decibels (hourly average).

The noise level measurements were conducted approximately between the hours of 7:00 a.m. and 9:00 a.m. based upon the time of day residents described experiencing the highest traffic noise levels (morning commuting hours). At the time of the noise level measurements, the observed atmospheric conditions consisted of a clear sky with approximate temperature ranging from 58°F to 68°F, the relative humidity was 30% to 50%, and the wind condition was calm (0 to 5 mph). The results of the noise level measurements are shown in Table 1 and are typical for an urban residential environment.

Based upon our field survey, there is a wall located adjacent to the west property line of the subdivision, which was constructed by the developer. The wall between Grand Avenue and West Robertson is approximately 6 feet tall; however, it does not break line of sight to the traffic using Loop 303. From approximately West Robertson Drive to North El Mirage Road, a 6-foot high wall is placed on top of the existing berm along the property line, resulting in the berm-wall combination breaking the line of sight to the traffic on Loop 303.

Nationally, noise abatement in residential areas for new highway projects (new roadway alignments or increases to existing capacity) is considered when predicted exterior noise levels approach or exceed 67 decibels, as established by the FHWA in Title 23 Code of Federal Regulations (23 CFR 772). However, ADOT's Noise Abatement Policy, adopted December 5, 2005, has a more neighborhood friendly action level and considers noise abatement when predicted or measured noise levels equal or exceed 64 decibels.

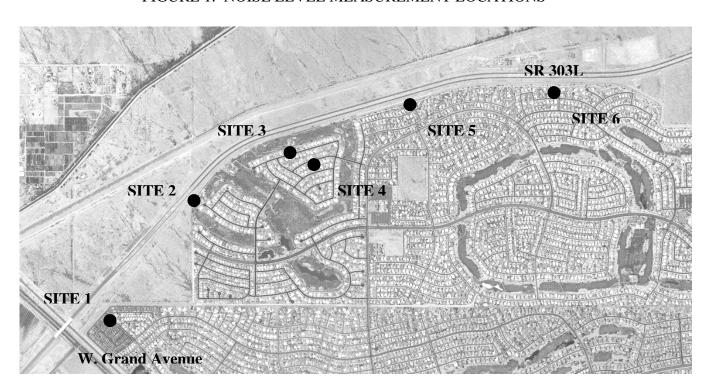


FIGURE 1. NOISE LEVEL MEASUREMENT LOCATIONS

TABLE 1			
MEASURED NOISE LEVEL			
ESTRELLA FREEWAY (SR 202L)			
Sun City West: April 23, 2007			

Site			Measured Noise
Number	Address	Time	Level Leq, dBA
1	16162 W. Vista North Drive	7:30 am to 8:00 am	52
2	15435 W. Robertson Drive	7:00 am to 7:30 am	56
3	15192 W. Las Brizas Lane	8:30 am to 9:00 am	53
4	15127 W. Carbine Way	8:30 am to 9:00 am	51
5	14746 W. Tomahawk Way	7:30 am to 8:00 am	50
6	23211 N. Via De La Caballa Lane	7:00 am to 7:30 am	55

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The measured noise levels ranged from approximately 50 decibels (hourly average) to 56 decibels (hourly average). Our assessment of the noise mitigation implemented by the developer and Maricopa County indicate that those measures appear to be working.

Prior to the future Loop 303 freeway construction beginning adjacent to the community, ADOT will evaluate the need for noise mitigation measures based on our noise abatement policy.

Sincerely,

Fred Garcia Environmental Planner Air/Noise Specialist Steve Beasley Transportation Manager Valley Project Management

cc: Max Wilson, Supervisor Maricopa County, District 4